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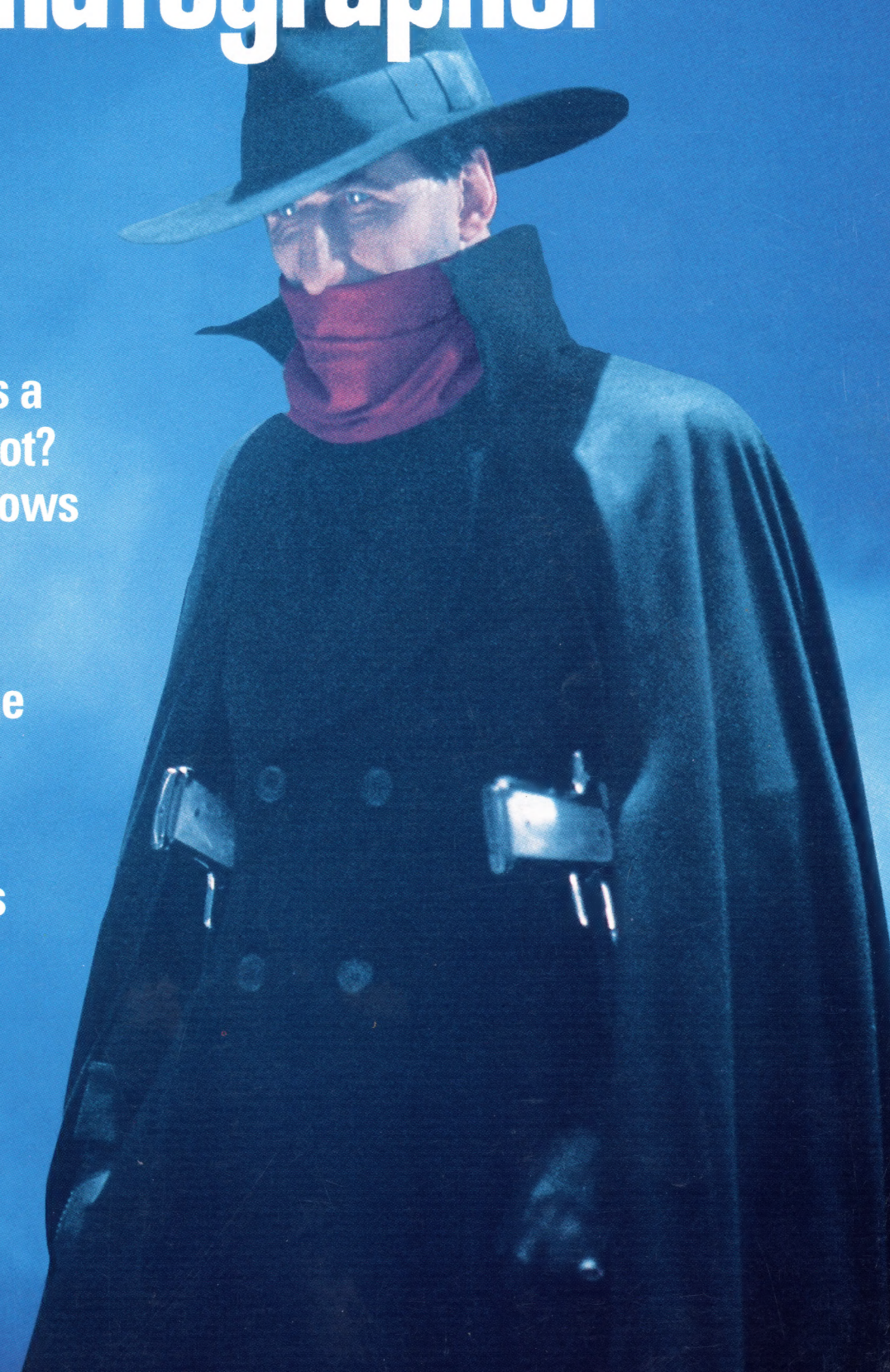
CGI on a Shoestring Budget

American Cinematographer

How Complex is a
Big-Budget Shoot?
The Shadow Knows

The Flintstones:
Special Effects
Evoke Stone-Age
Suburbia

Wide Range of
Looks Enhances
I Love Trouble





When the name of any cinematographer comes up as a candidate for an assignment, one question follows immediately: "How fast are they?" In most cases, an accurate answer is not quite so simple.

Directors of photography carry a load of responsibilities as variegated as they come. The artistic and technical aspects

of the work, often dissected in these pages, are made possible only by an inordinate amount of careful planning and plain hard work. To coordinate and lead the efforts of a crew of people is an easily derailed endeavor; the making of a film also requires diplomacy, honesty, patience, and insistence on excellence.

This "other side" of the

director of photography's work was much on the mind of Stephen Burum, ASC during a recent interview.

"People understand about the art and the light and how you choose the style," says Burum. "That's been talked about a lot more eloquently than I can talk about it. It's difficult to say anything that really means



Shedding Light on *The Shadow*

Cinematographer Stephen Burum, ASC discusses the logistical, administrative and organizational requirements of a big-budget production.

by David Heuring



Photos by Ralph Nelson

anything unless the listener has really done it in depth. Everybody is anxious to do the work, which they perceive to be photographing the picture. But in order to photograph the picture, you have to get everyone and everything in position to make the shot. It's like waging a war."

Burum should know. A third-generation Californian, he

became a director of photography in 1964. His versatility is well-known, encompassing wildlife films, fantasy (*Something Wicked This Way Comes*, *The Bride*), special effects (*Cosmos*), streetwise realism (*The Outsiders*, *Rumble Fish*), and the horror of war (*Casualties of War*, and second-unit work on *Apocalypse Now*). Burum has earned an Os-

Opposite: Alec Baldwin in his first hero shot as the title character, photographed on a stage at Universal. **Above:** *The lovely (and hypnotized)* Margo Lane, portrayed by Penelope Ann Miller, pursues Lamont Cranston.

Directed by Russell Mulcahy
Produced by Martin Bregman, Michael Bregman, Willi Baer and Lou Stroller
Director of photography,
Stephen Burum, ASC



Above: Burum's firelight adds warmth to a romantic scene between Cranston and Lane. **Right:** On the Universal backlot, Baldwin is sprawled on a platform built specifically to achieve a dramatic low angle. Burum (in cap) shares a laugh at his expense with Miller (right).

car nomination and an ASC Award for *Hoffa*, along with ASC nominations for *War of the Roses* and *The Untouchables*.

It's obvious from the deliberate way the mild-mannered, bespectacled Burum speaks that he's used to expressing himself in a very clear and careful manner to avoid misunderstandings and obviate the need to repeat himself. "Simply put, you don't want to go around all day solving mechanical problems," he says. "You want to foresee them, and solve them ahead of time.

"*The Shadow* is a good example of the whole spectrum of situations, because we did some of the material on a studio soundstage with sets; we did some of it on the backlot at Universal with sets; we did some of it on locations here in town that were interiors, like the Pantages theater, where we had to be very careful not to wreck anything; and we went into locations and modified the structures. So you had the gamut from a very controlled situation to a situation that was much more challenging."

With practicality the



watchword, we start at the beginning: "No matter how many times people have said this, I'm going to say it again," Burum states determinedly. "The most important thing is preproduction — to choose the right locations, to choose the right time of day, and to let everybody in every department know what you need to do to make the movie work."

That said, let's take the first situation — the controlled conditions on a studio soundstage — and enumerate the con-

cerns of the professional cinematographer. "First, of course, you talk to the director," Burum begins. "You talk to the production designer, you talk about the script. The production designer comes up with sketches. You talk about the sketches, and you finally agree on something that you all think is going to be great.

"Now you have to get a stage that is going to take this set. And there's never been a soundstage built that's big enough," he chuckles. "No matter how small the set, somehow the stage is not quite big enough. Modifications must be made. On a major lot, there are always scheduling problems to deal with. How many days will it take to build it, to rig it, to take it out, how long will you need it?

"Sometimes people are given stages that are much too

big for what they're doing — for various reasons — and that leaves you with a smaller stage. So it's always good to walk around the lot and see what other people are doing. I've worked on shows — *The Shadow* was not one of them — where, unbeknownst to the studios, the producers would trade soundstages because it better suited their circumstances."

In the expensive, high-pressure world of filmmaking, a straight answer is as good as

In a dream sequence, Margo is consumed by fire in a Tibetan temple.



gold. Confrontation-averse people need not apply. "You learn to solve problems very directly," says Burum. "A big layer of middle management is counterproductive. You should be able to go and speak to somebody one-to-one and get things done. Things need to be expedited. The more informal things are, the better."

"This informality requires that when somebody says something, they keep their word," he cautions. "So when you say to people, 'This is what I want to do and how I want to do it,' you'd better be sure of what you're saying, because it impacts everybody."

Once the stage has been chosen and reserved and the plans agreed upon, the production designer produces a spotting plan, a graphic description of the set placement on the stage. The director, occupied by acting and story concerns, is generally not a party to these arrangements. "It's one of your jobs to make sure it all works mechanically," explains Burum.

Take catwalks, for instance. The cinematographer must ask (and answer correctly) the following questions about this seemingly minor consideration: Is it economically feasible? Will we be on this stage long enough to amortize the cost? Will it give you a mechanical advantage? Is it going to make things go quicker for you?

"If the answer to all these questions is yes, you order catwalks," says Burum. "You have to make an economic judgment, an artistic judgment, and a mechanical judgment. Then you have to decide where the catwalks are going to be."

Once the catwalks are in place, the construction foreman begins to build the sets. "You talk to the production designer, and you talk to the construction foreman. Once things are up, they look a little different than in the plans, and everyone makes a couple of little adjustments. You always have to have yourself available for those adjustments. It's better to do them while you're building than to have to tear out

a wall later."

Opportunities for improved efficiency often present themselves at this time. "You want to go in early, when the construction crews come in, and walk around, meet and greet, have a cup of coffee, say hello to people, and see if anyone has any questions. Then at the end of the day, you want to do the same thing before the construction people go home, because they may want to order something and start it early in the morning. And when the sets are being painted, it's good to drop by and see that the colors chosen from the swatches look good on a bigger scale."

"The construction foreman might say, 'It will save me a lot of money if we don't have to move these steps. It's much easier for me to build them this way.' And you look at it, and think about it, and you say, 'I think that's OK,' or 'It's very important to have it this way,' in which case they'll spend the time and the money to do it."

Burum pre-empted sev-

eral potential time-eaters during his morning walk-throughs for *The Shadow*. "In the temple, we had a lot of intricately detailed gold-leaf work which was not showing up. So I was able to ask a production painter to go in with a darker gold and line all the crevasses. This is obviously preferable to walking onto the stage during production, turning on all the lights, and suddenly saying, 'Gee whiz, why don't those gold things show up? Let's get the standby painter here, and fix this.' Then you're losing shooting time."

After the sets are in place, they are invaded by the set dressers and the electrical rigging crews. "When you're ready, you get together with the gaffer, the rigging gaffer, the rigging best boy and the regular best boy, and you walk around the set, and you decide roughly where you want to put up which lights. You have somebody write those instructions on the beds with chalk: 2K, 5K, 10K, whatever it is. And while you get it all laid out, you talk about your strategy. In this one I used a lot of hard light, and when you use a lot of hard light, you have to use a lot of grip

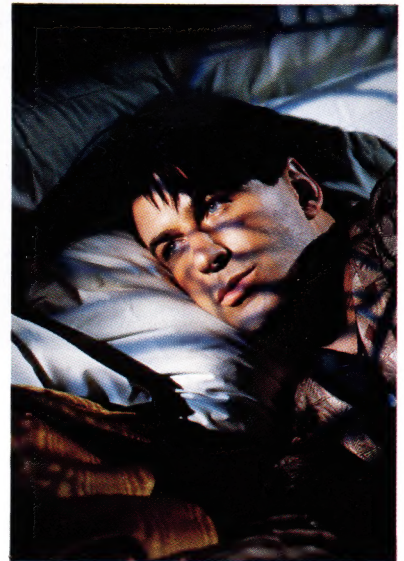
equipment, to flag it and make shadows, etc. In this case, instead of the grip equipment I used a lot of snoots, a much simpler solution to our light control problem."

Enter the lot best boy, the liaison between the crew and the studio equipment department. "Nobody really understands what the best boy does," Burum gripes. "The second man in any organization is an incredibly important and often underrated position; they don't get the credit they deserve. The best boys with the electricians and the best boys with the grips have two responsibilities, and they are administrative responsibilities: first, to make sure that the equipment is ordered, received, and counted, and that it works and is returned in good order. And second, if you order people, [make sure] that they are there, and that their time cards are filled out and that everything is in order so they can be paid."

"The studio provides an extra best boy to look after their equipment, but more importantly, this is someone who knows where everything is. Usually, they've been there for years.

You might say, 'You know, I was looking around and I saw this thing. . . ' and he'll know exactly what you mean, where it is, and how to get it."

Running an average studio feature film costs roughly \$8000 to \$15,000 an hour. Burum takes a look at that river of cash flow through the eyes of a producer: "To a producer, that money is already spent. He'll say, 'I have allocated that amount of money over so many days.' If you save one or two hours, the pro-



Below: John Lone, bedecked in a spectacular costume, plays the *Shadow's* nemesis. Right: Burum made visual connections between scenes and characters through the use of shadow patterns.



ducer doesn't see that, in a bean-counter sense, as having saved him \$30,000. But in a real sense, if you can get yourself two hours ahead of the game, or maybe a day ahead of the game, it can be invaluable. Also, by solving mechanical problems before you start shooting, you buy the most important thing of all: acting time.

"On *The Shadow*, the first two weeks we had a very tight schedule," he offers. "We had two Tibetan temple sets, and we had a large 1930s nightclub. We rigged and lit all that first, during preproduction. When we came in the first day, it was literally a matter of an hour to the time we went to roll camera. If you had to bring everything in, put everything up, and run cable, it could take five, six, seven hours. To just walk onto a set, have it all ready,

you're going out of town on a location picture. It is critical that you have two people you know well in every department," insists Burum. "It's very important to have someone who can stay with you and somebody who can do the rigging. And it's very difficult to work somewhere where people aren't used to doing feature films, no matter how nice people are or how eager to help. Experience is a big thing." Burum also has some advice about on-set politics and petty personality clashes. "Anytime you get more than two people together you have to worry about these problems. You have to be honest and forthright and fair, and you can't stab people in the back. If you say, 'I want you to take the effort to put a light on top of this building,' you'd better damn well use that light. Otherwise those people begin to think they're not worth-while, and that you don't know what you're doing. It's just bad leadership. You don't want to waste your people, and you don't want to waste your equipment."

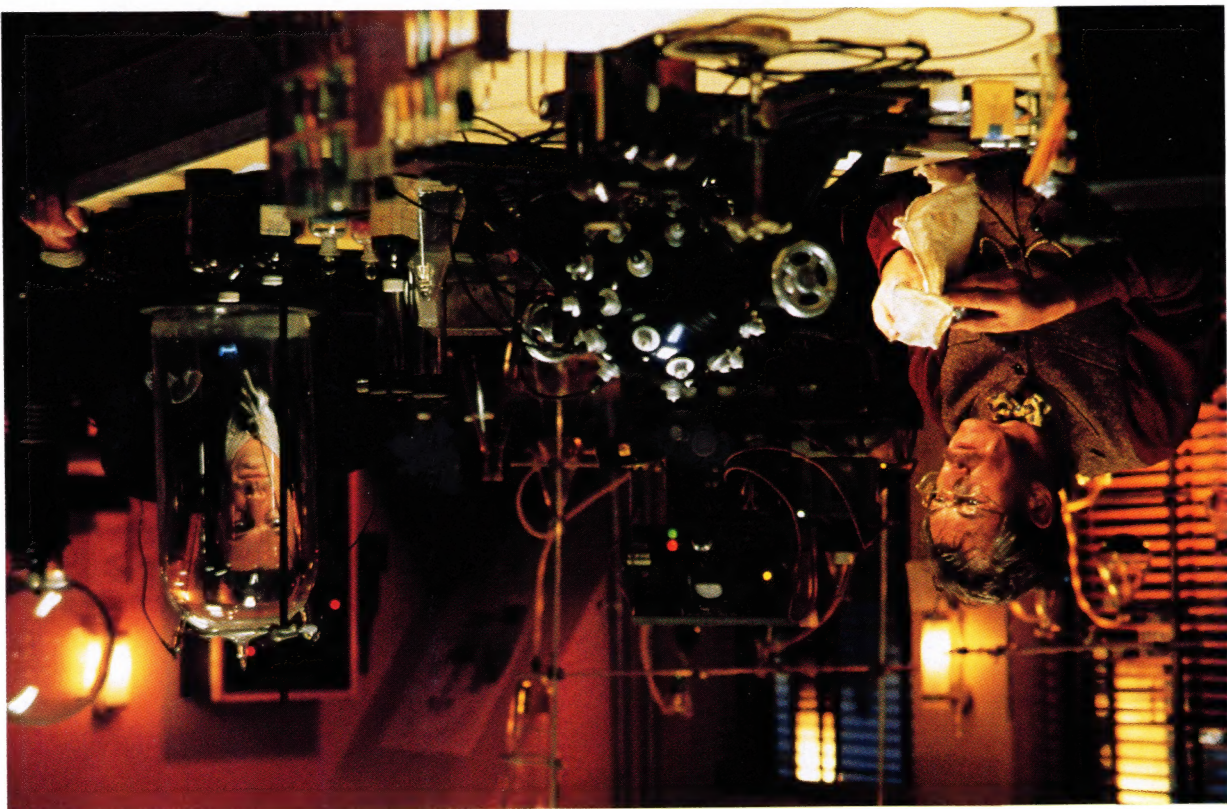
"All of this administrative stuff goes on while you're shooting the picture," Burum remarks. "Needless to say, one needs people who can be counted upon to understand and execute the wishes of the cinematographer. Often, the rigging can be done by just two people. You always try to send people out in pairs — never send one person anywhere to do anything," he advises. "Two people can do much more than one person. Somebody always has to climb a ladder or something."

"This also applies when up the next set according to the instructions of the cinematographer. "Either first thing in the morning when you come in, or at noon after dailies, or after work, you go to the stage with your key grip, his best boy, the gaffer, the electrical best boy, and the rigging grips and the rigging electricians, and talk about what you're going to do. Sometimes they'll rig it in the middle of the night if it's going to conflict. Or they may be doing it next door while you're shooting."

and do it — it's just psychologically a good thing to do. "You always like to try to get ahead [during] the first two weeks, because then the studio knows that everything's working and they relax. It takes everybody a little time to learn the job. Everybody assumes that all movies are kind of the same, but they're not. You have to learn every show. Every combination of people is different and you have to learn how each system works."

Every director is different, as well, but certain consistencies in the director's main concerns are the actors and the story. "One person can't do both the director's and the cinematographer's work," Burum avers. "It's too much. The director should not be thinking about the mechanical details."

Keeping the wheels of production turning smoothly is also the purpose of the rigging crew, which usually consists of electrical and grip crews. While the show is up and running, the rigging crew goes ahead and sets



Elaborate production design is enhanced by forbidding source lighting.

Burum's Visual Approach



Two separate Tibetan temple sets were built for the shoot, with Burum participating in their design and construction.

Years ago in the Orient, the Shadow, who aids the forces of law and justice, learned the secret of how to cloud men's minds, so that they cannot see him. His friend and companion, the lovely Margo Lane, is the only person who knows to whom the voice of the invisible shadow belongs.

The Shadow made his first pulp fiction appearance in 1931, and 325 more dime-novels were mined from that productive vein before 1949. The radio show began around the same time, as an episode of "The Detective Story Hour." An interesting footnote for film fans: during the fourth season of the radio show, the roles of Lamont Cranston and Margo Lane were played by Orson Welles and Agnes Moorehead.

Stephen Burum can remember hearing the signature laugh over the radio as a child, and that memory played into his approach to photographing the feature film version, which stars

Alec Baldwin in the title role and Penelope Ann Miller as his lovely assistant.

"I only heard *The Shadow* on the radio," recalls Burum. "The comic books came later. So I said to myself, 'If I were 8 years old again, and I were listening to this, what would I imagine in my mind?' Instead of using the comics as a style base, I wanted to remember what it was like to be a little kid listening to the radio and imagining what was going on. Whatever that style is, that's what I did," Burum chuckles. "I didn't try to synthesize, or ask 'What does the art on the cover of a pulp novel look like?' All of that's already been done.

"They had done the darkening of Batman, which was a brilliant design idea, but I didn't want to do that," says the cinematographer. "Instead, I did a hard-light picture, because it's about the Shadow and it's about casting shadows. So I lit basically very flatly, with a lot of shadow

patterns. I would have recurrent patterns — like the Oriental pattern that you see in the Tibetan scene — and I would just project it on a wall somewhere. You see the pattern on a wall in New York later, in a scene reminiscent of that, so you sort of have the spirit of his time in Tibet following him. It was a visual allegory."

Light and shadow played an appropriately crucial role in the film. "There's a scene in which Lamont Cranston needs to convince his uncle, the police commissioner (Jonathan Winters), that the Shadow isn't worth an investigation. Lamont goes into what I would consider a 'semi-clouding' of a person's mind. He doesn't completely disappear. He's doing something suggestive. So I wanted to do something visual to suggest this. They're in a nightclub and there are shadows around, and I just had Alec lean back, out of the light and into silhouette. And then he says, in the Shadow's voice, 'There is no shadow.' We cut to Jonathan Winters, and he repeats the line. When he's through, he leans forward and comes out of the shadow. That was a very simple thing. We didn't have to do any fancy effect, and yet it works very well."

Projected shadow patterns reminiscent of Lee Garmes' slashing diagonals in *Scarface* (1932) show up throughout *The Shadow*. "When Lamont and Margo get together for the first time and have dinner, I put these little shadows on their faces — a similar one on both of their faces; again, [to provide] a visual allegory that they were kindred souls. The idea is that she understands things about him — not intellectually, but in a spiritual way. So it was a visual way of presenting these people, and symbolizing their bond." — DH

Burum's careful planning and advance troubleshooting techniques paid off on huge, complex sets like this 1930s nightclub, where snoots on all lights saved time and equipment without sacrificing control.



"There are always times on a picture when you have to ask people to go above and beyond, and you never want to waste that ace in the hole," counsels the cinematographer. "If you continually burn people out, you won't have them at their peak."

On the subject of interpersonal tensions — not a minor consideration during the marathon pressure-packed days on the set — Burum repeats the mantra of a former silent editor and director who taught him at UCLA: "Miss Arzner always said that 'ladies and gentlemen make motion pictures.'"

"The idea is to never let anyone get to the point of cracking," Burum explains. "You have to understand the other person's problem. Everyone on a motion picture set thinks their job is the most important and the hardest — and it is. And you have to give that to them. You cannot have a person lose face or lose their pride. It is disastrous. We can't afford petty bickering and carrying on. Everybody's trying to do the same thing. Most of the time

when people wrangle or fight, it's not out of pettiness or stupidity, but because they want to do the best job they can and they feel they're not being allowed to do so."


Also, according to Burum, it's important to remember that there's no such thing as a completely smooth production. "Whenever you see somebody else's movie, you think, 'Gee, what a great job so-and-so did, and it's flawless, and it looks like they had no trouble at all.' And you say to yourself, 'Some days are like a bloodbath. Every day there are problems.' Well, the truth is everybody has those problems every day, and you just have to get through them the best you can."

Crew interaction is not the only aspect of the cinematographer's work where a degree in psychology would come in handy — there's also the cast. From the actor's perspective, feeling comfortable and confident is an important part of giving a good performance, and the cinematographer's role is again


crucial. According to Burum, it begins in the prep stages, with tests. "Testing is important, for costumes and especially for makeup. We have had many changes in emulsion in the last ten years, and there is no longer a makeup base made that is color-corrected for films. So everyone has their favorite makeup that makes them feel good. Let's say you've got two very beautiful women in the picture. And you shoot them together, and suddenly one woman looks wonderful and the other looks green.

"If you can shoot a test and see that it's not balanced correctly, the makeup people can fix it. They say, 'We'll put a little bit of this color in, and we'll color-correct this so it looks right.'"


"In the case of *The Shadow*, I had just worked with Penelope Ann Miller on *Carlito's Way*, so I knew she has a very yellow skin. I discussed it with Ronnie Spector, the makeup person. We put some blue in her makeup so her face didn't look so yellow, and we made her hair a little redder. She now has a little



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pink tone, which is complemented by her hair color — she looks terrific. People will be stunned by how sexy she is. But you can't do that without a test."

Turning back to the set, Burum relates a few of the considerations involved in another practical situation: a location in which some limited construction is possible. Location scouts know the cinematographer's primary concern — high ceilings and areas to hide lights. "You want to be able to keep the lights out of the way, so you want something that has a high ceiling," Burum says. "There are two very bad situations in locations: hallways and stairways. Usually you see all the surfaces. You have to either light the walls and let the people go in silhouette, or you have to put in some sort of physical restricters to hide the lights.

"In *The Shadow*, we used a hallway down at the old Pacific Electric building. The production designer put in false headers to hide the lights. When you do something like that, with a real ceiling, you have to be able to hide the cables, and when you shoot back in the other direction, you have to take all the lights and flip them to the other side of the headers, which is time-consuming. It's very important to sequence the work. Often you'll have to go out of order, because it's so time-consuming to change things around.

"The perfect plan will have you flipping the lights just once; twice is more realistic. It's ideal to have the rigging crew come in and flip them while you're at lunch, so you don't have to deal with it. You want to keep as much work off of the shooting time as you can. If you can't have it done at lunch, try to have it done ahead of time or first thing in the morning, or stay the extra hour. All of that stuff pays tremendous dividends. An hour of overtime can save you half a day's shooting. And sometimes an hour's overtime can make the difference between moving from

one location to another.

"People who do television series and movies of the week are masters of this moving and prerigging. That's where the prerigging is so important, because you literally do not have any time. I've always felt that the faster you have to go, the better people you need."

Perhaps the most important item on the cinematographer's long list of necessary skills is the most difficult to describe: leadership. "I remind myself to keep everyone involved in the problem-solving," reveals Burum. "That way you don't lose anyone. You have everybody thinking about the problem. If you solve every problem yourself, and you tell them how to lay the dolly track, then you're not using them. You want to hire great people who have great ideas and experience. I used to love my old key grips who had been working in the business since the Thirties. The only way you learn is by knowledge being passed down. That's how any art form becomes better. You can't think of everything yourself. It's so important to have people you can ask, with confidence, 'What do you think about this idea?'

"People have to be proud of what they're doing," the cinematographer concludes. "It's the thing that makes everybody want to come back and work these long days. Part of your responsibility is to help this. This is very, very hard work. You are on all day. But if you love what you do, all of that other stuff goes away. If you had to do my job as a job and you didn't love it, believe me, you would be in face-down hysteria."

Space considerations prevent the inclusion of Stephen Burum's practical advice regarding the angle, intensity and direction of the sun. Watch for this advice in a upcoming issue.